

AIR COMMAND AND STAFF COLLEGE

AIR UNIVERSITY

CONTRACTORS ON THE BATTLEFIELD:

PLANNING CONSIDERATIONS AND REQUIREMENTS

by

George (Sam) Hamontree III, Major, USA

A research report submitted to the faculty

in partial fulfillment of the graduation requirements

Advisor: Lieutenant Colonel NesSmith, USA

Maxwell Air Force Base, Alabama

January 30, 2002

Distribution A: Approved for public release; distribution unlimited.

Report Documentation Page

Form Approved
OMB No. 0704-0188

Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.

1. REPORT DATE 30 JAN 2002	2. REPORT TYPE N/A	3. DATES COVERED -
4. TITLE AND SUBTITLE Contractors On The Battlefield: Planning Considerations And Requirements		
5a. CONTRACT NUMBER		
5b. GRANT NUMBER		
5c. PROGRAM ELEMENT NUMBER		
6. AUTHOR(S)		
5d. PROJECT NUMBER		
5e. TASK NUMBER		
5f. WORK UNIT NUMBER		
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Air University Maxwell Air Force Base, Alabama		
8. PERFORMING ORGANIZATION REPORT NUMBER		
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)		
10. SPONSOR/MONITOR'S ACRONYM(S)		
11. SPONSOR/MONITOR'S REPORT NUMBER(S)		
12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release, distribution unlimited		
13. SUPPLEMENTARY NOTES		
14. ABSTRACT		
15. SUBJECT TERMS		
16. SECURITY CLASSIFICATION OF:		
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified
17. LIMITATION OF ABSTRACT UU		
18. NUMBER OF PAGES 34		
19a. NAME OF RESPONSIBLE PERSON		

Standard Form 298 (Rev. 8-98)
Prescribed by ANSI Std Z39-18

Disclaimer

The views expressed in this research paper are those of the author and do not reflect the official policy or position of the U.S. Government or the Department of Defense. In accordance with Air Force Instruction 51-303, it is not copyrighted, but is the property of the United States government.

Contents

	<i>Page</i>
DISCLAIMER.....	ii
ILLUSTRATIONS.....	iv
PREFACE.....	v
ABSTRACT.....	vi
CHAPTERS	
I. Introduction.....	1
II. Background: Role and importance of Contractors on the Battlefield (COB).....	4
III. Different types and Definitions of COB.....	7
A. Theater Support Contractors.....	7
B. External Support Contractors.....	9
C. System Contractors.....	12
IV. Contractor Considerations.....	16
A. Combatant/ Non-Combatant.....	16
B. Limited War.....	17
C. Principle of Contractor Support.....	17
V. Current field requirements and recommendations.....	20
VI. Conclusions.....	23
Bibliography.....	26

Illustrations

	<i>Page</i>
Figure 1 Civilian Participation in Conflicts and Wars.....	5
Figure 2 Theater Support Contractor Diagram.....	10
Figure 3 External Support Contractor Diagram.....	11
Figure 4 System Contractor Diagram.....	14
Figure 5 Joint Contractor Requirements	21-22

Preface

My objective is to provide a research paper that is easy to read, informational, and applicable to current operations. This paper is a “Contractors on the Battlefield 101” or an introduction of planning considerations and requirements for contractors on the battlefield. The information is best suited for officers and non-commissioned officers at the operational and tactical levels. This paper is of particular interest to those who are involved in contracting, planning and logistics. It provides a common operating picture and direction for further information.

My career in the US Army over the last 16 years has predominantly been in aviation maintenance and logistics. As a unit and intermediate level maintenance commander, I have had the opportunity to integrate contractors in training, maintenance, and deployments. As a junior officer, I was unaware of the requirements and considerations for my contractors in garrison to deploy into a battlefield environment. While serving in current operations on a General Staff, I worked with a Time-Phased Force Deployment Data List (TPFDDL) that identified every moving part from the Continental United States (CONUS) to Kuwait. As support units deployed, I questioned how the contractors were going to deploy. During my next command my unit was tasked with deploying soldiers to Bosnia and Kosovo in support of stabilization forces and conducting split-base operations in Europe and CONUS.

In CONUS my unit and supported customers relied on contracted civilians for maintenance support. Conducting split-base operations over such great distances raised many questions about the required contractor support both deployed and in CONUS. During the planning process, there were unanswered questions and a general void in knowledge about contractors on the battlefield at various echelons. Although the support packages worked out, I still had an uneasy feeling about the process and my knowledge of COB. My quest to clarify these issues and gain knowledge about COB is the driving force for my research.

Abstract

Contractors on the Battlefield: Planning Considerations and Requirements introduces the basics and foundation for those who want to learn about the history, terminology, and process for obtaining contractor support on the battlefield. The research paper is primarily rooted in Joint, Army, and Air Force manuals and regulations. Personal experiences from the author, Air Force, and Army students attending the Air Command and Staff College compliment the research with current field applications and experiences. The research paper also presents a broad range of growing concerns and requirements for using contractors on the battlefield. However, additional sources are provided for those who want to learn specifics of related topics and concerns. The research paper can best be described as “Contractors on the Battlefield 101” for officers, non-commissioned officers and contractors.

Introduction

*"I don't know what the hell this 'logistics' is that Marshall is always talking about, but I want some of it."*¹

Fleet Admiral E.J. King:
To a Staff Officer, 1942

Contractors on the battlefield (COB) is a growing concern at all echelons for a myriad of reasons. The greatest hurdle in the planning and requisition of contractors on the battlefield is the lack of fundamental understanding of contractor deployment, force protection, and support requirements. There are three types of contractors, which are categorized by the type of support provided on the battlefield: theater support, external support, and system contractors.² Chapter 3 provides the definitions and significance of the three types of contractors. Why is understanding the basics of contractors on the battlefield so important? Different types of contractors on the battlefield perform different functions and have unique requirements for deployment integration in the Time-Phased Force Deployment Data (TPFDD), funding procedures, and contracts that enables the contractors to support the United States military in a battlefield environment.³

At the tactical level logisticians (S4s), maintainers, and material managers try to juggle planning and deployment issues with frequent obstacles such as personnel shortages, split-base operations, logistical forecasts and budgeting restraints. System contractors can assist the tactical commander with technical expertise on newly upgraded or recently fielded equipment. Traditional roles of system contractors are most frequently associated with logistics and maintenance support functions. With the

integration of technology and tactics such as complex video and communication systems and unmanned aerial vehicles (UAV) into the battlespace, system contractors are providing more support closer to the hostile fire. As the traditional concept of the Forward Edge of the Battle Area (FEBA) continues to fade in asymmetrical warfare, the necessity of these contractors will bring them closer to our adversaries.

At the operational level, planners consider integrating external and theater support contractors into current and contingency operations. Contractors available from host nation resources can augment the military with reception, positioning of facilities, material management, supply support and maintenance, movements management, and distribution. Contractors can also provide assistance with sanitation facilities, transportation assistance and minor construction⁴. Contracting personnel can procure most of these functions as well as commercial support for APOD/SPOD operations.⁵

The Army is a strong advocate of “training the way you’re going to fight”; however, this concept is not adequately applied to contractor support. The military enjoys the knowledge and expertise of various services provided by contractors in garrison. The dependence on contractor support that it is relied upon in garrison must be addressed in contingency or deployment planning. At both the unit and intermediate maintenance level, I have had an extensive interface with external support and system contractors. Contractors are a force multiplier in garrison and on the battlefield. A technique used to determine the continuity of contractor support from garrison to the battlefield is to directly ask each contractor that provides mission support, “What provisions are in your contract to deploy with my unit to combat and how are you getting there?” If a contractor in garrison is not designated to deploy with your unit, raise the

issue in your chain of command and include your concerns in the monthly unit status report (USR).

The biggest hurdle in planning and coordinating contractor support on the battlefield is the basic lack of understanding of contractors on the battlefield. Confusing contractor support requirements often leads to a deficit of resources or an over expenditure of resources to ensure adequate support is in place for deployable systems. The reliance of contractor support in garrison is often convoluted, and may not reflect the actual contractor support required on the battlefield.

¹ Joint Publication 4-0, *Doctrine for Logistics of Joint Operations*, 27 January 1995, I-6.

² Army Field Manual 3-100.21 (100-21) *Tactics, Techniques and Procedures for Contractor in the Battlefield*, 2ND Draft, July 2001, 1-10.

³ User's Guide for JOPES (Joint Operations Planning and Execution System), 1 May 1995, 14.

⁴ Army Field Manual 100-10-2, *Contracting Support on the Battlefield*, August 1999, 1-III.

⁵ ibid, np, 1-III.

Chapter 2

Background: Roles and importance of contractors on the Battlefield

Civilians have established themselves as an integral and vital part of the Department of Defense's total force team. With distinction, they perform critical duties in virtually every functional area of combat support and combat service support, both at home and abroad⁶.

A F Pam 10-231, Federal Civilian Deployment Guide

Contractors on the battlefield have played a vital role in the nature of war for centuries. The United States began its own revolution with the augmentation of contractors on the battlefield and has continued to use them to the present.⁷ So if contractors have played a part in conflicts since this nation was founded, why does each new generation of the military have to relearn the lessons associated with integrating this old practice into new conflicts?

In the past, two predominate reasons have kept contractors on the battlefield from becoming a doctrinally recognized part of the military planning: the lack of recognition and doctrine. During past conflicts, contractor support has not been highly publicized by the media. Many civilians and military personnel do not realize the impact that contractors have had on the battlefield, yet contractors' contributions on the battlefield have been instrumental in mission success.⁸ Furthermore as conflicts and wars

terminate, efforts to capture lessons learned from the contractors on the battlefield have had little emphasis. This issue has been addressed by the Army and tremendous progress has been made by establishing Contractor on the Battlefield regulations, field manuals, training, tactics and procedures. These products are under constant review and revision to ensure the successful utilization of contractors on the battlefield for current and future operations. Figure 1 provides a historical comparison of the ratios of contractors to the military on the battlefield.

WAR/CONFLICT	CIVILIANS	MILITARY	RATIO
Revolution	1,500 (est)	9,000 (est)	1:6 (est)
Mexican/American	6,000 (est)	33,000	1:6 (est)
Civil War	200,000	1 Million	1:5 (est)
World War I	85,000	2 Million	1:20
World War II	734,00	5.4 Million	1:7
Korea	156,000	393,000	1:2.5
Viet Nam	70,000	359,000	1:6
Desert Storm	9,000 ⁹	400,000+ ¹⁰	1:50
Bosnia	300	3,000 ¹¹	1:10

Figure 1. Civilian Participation in Conflicts and Wars

⁶ Air Force Pamphlet (AFPAM) 10-231, *Federal Civilian Deployment Guide*, 1 April 1999, 1.1.

⁷ Colonel Steven J. Zamparelli, "Contractor on the Battlefield: What have we signed up for?", March 1999, 5.

⁸ *ibid.*,6

⁹ David L. Young, *Contractors on the Battlefield: Planning Considerations for the Joint Force Commander* 18 May 1998, Naval War College, Newport, RI

¹⁰ DESERT STORM, <http://encarta.msn.com/find/concise>. "Persian Gulf War," Microsoft® Encarta® Online Encyclopedia 2001

¹¹ BOSNIA <http://encarta.msn.com> © 1997-2000 Microsoft Corporation.

Chapter 3

The Three Types of Contractors on the Battlefield

The improvement of the understanding is for two ends; first, our own increase of knowledge; secondly to enable us to deliver that knowledge to others.¹²

Locke

As doctrine and terminology of contractors on the battlefield are developed, it is important to understand the definitions of the different types of contractors that occupy the battlefield and their requirements. Why is understanding the different types of contractors so important? Each type of contractor requires different considerations in contract procurement, tracking management, support, and force protection. Furthermore, some contracts may dictate their incorporation in the Timed Phased Force Deployment Plan (TPFDD). The three type of contractor support are referred to as theater support contractors, external support contractors, and systems contractors.¹³

Theater Support Contractors

"No one knows better than I the tremendous work that Brown and Root has done in Somalia. The flexibility and competence demonstrated by your employees were key factors in allowing US forces to transition logistical support to the UN. . . ."

*John M. Shalikashvili
Chairman of the Joint Chiefs of Staff¹⁴*

Theater support contractors perform services that are oriented to the immediate needs of the operational commander.¹⁵ Services such as light construction, port

operations, transportation and security augmentation are examples of support that fall into this category. Some historic examples of services provided by theater support contractors are the loading and downloading of the aircraft involved during the Berlin Airlift Operation, and the stevedores that provided port service during the United States involvement in Vietnam during the 1960-1970s.¹⁶ This begs the question, “How are these contracts procured?”

Generally, theater support contractors are procured from the principle assistant responsible for contracting (PARC). The PARC is the commander’s senior acquisition advisor responsible for planning and managing all theater support contractors.¹⁷ The urgency of the contract and the magnitude of the cost will determine which venue is used to obtain the contractors. Theater support contractors are also more likely to have more indigenous or host nation contractors due to the nature of services being provided. While the commander is responsible for the safety and security of the contractors, there is normally no requirement for their integration on the TPFDD. However they should be coordinated and included in operational plans so that their administrative and logistical requirements will be identified to the appropriate planners.¹⁸

What are the options for unplanned and unexpected theater support contractors? Military contracting officers follow operational principals and guidelines to acquire the needed contractor support.

“(Military) contracting is an integral part of supporting Army forces. It is a tool that units and the acquisition community use to obtain goods or services in support of their missions. Contracting support bridges gaps that occur as military logistics resources are being mobilized and may be necessary for the duration of the contingency. Contracting is valuable where Host Nation Support (HNS) agreements do not exist, or where HNS agreements do not provide for all the supplies or services required.”

FM 100-10-2

If contractor support is required, the contracting officer coordinates with the appropriate staff directorates (G1, G2, G3, G4, G5 and G6) and US Embassy for recommendations to ensure the contract complies with HNS agreements. Satisfying support requirements by contracting indigenous resources improves response time and frees airlift and sealift assets for other priority needs. Contingency contracting support, along with LOGCAP and HNS, complements but doesn't replace available and operational military support systems. Figure 2 provides a theater support contractor diagram.¹⁹

External Support Contract

External support contractors provide support to deployed operational forces in a manner separate and distinct from either theater support or system contractors.

FM 3-100.21

External support contractors provide the combatant commander and his staff the capability to use pre-planned contractor support to augment support capabilities through the LOGCAP umbrella, contingency contracting from the Logistics Civil Augmentation Program (LOGCAP), and the Air Force Contract Augmentation Program (AFCAP)²⁰. For example, a task force

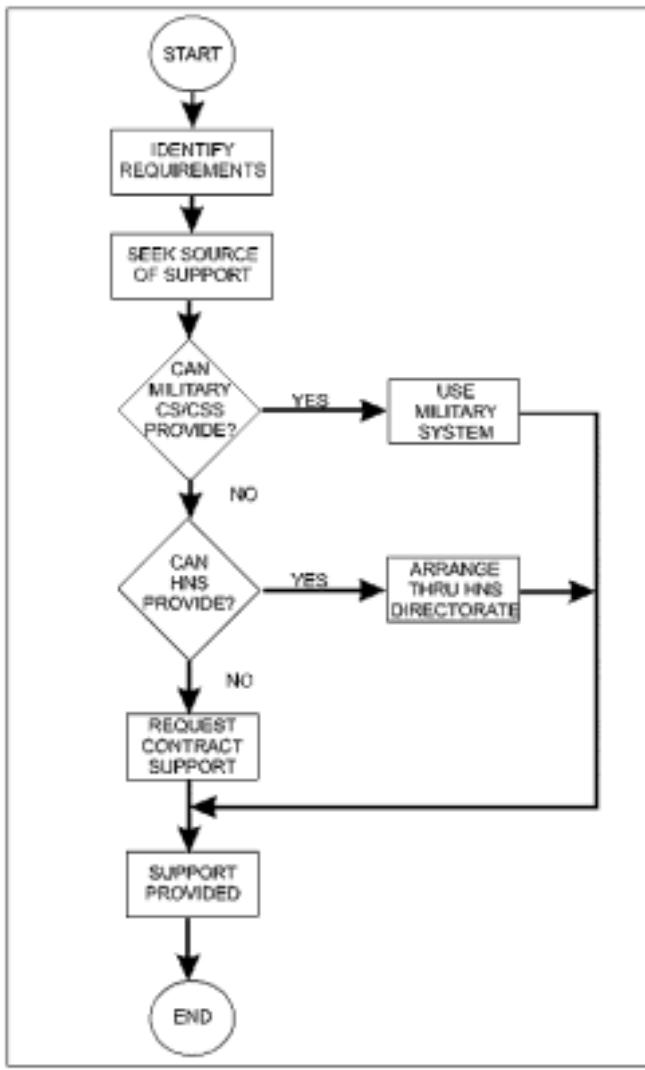


Figure 2. Theater Support Contractor Diagram

designated to participate in a peacekeeping deployment will require general ground and intermediate aviation maintenance support. The maintenance companies are not designed by their Modifies Table of Organization and Equipment (MTOE) to conduct extended maintenance over protracted areas. The companies also have a support responsibility to their customers at their home station. The Army Service Component Commander can incorporate

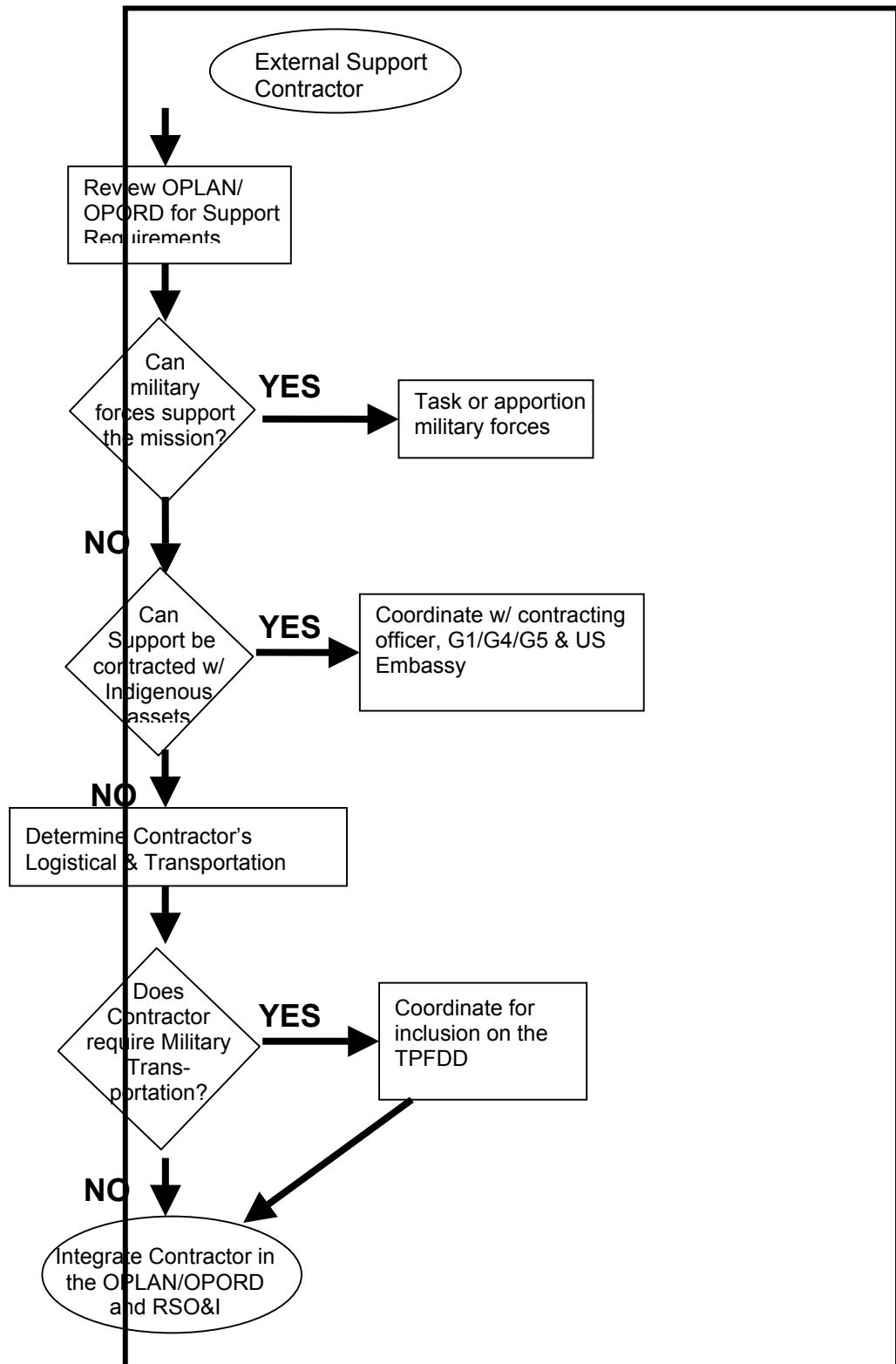


Figure 3. External Support Contractor Diagram

external support contractors to fill the void of military capabilities with agencies such as LOGCAP.

System Contractors

System contractors are contractors that provide support to material systems. Most of the system contractors provide support that enhances readiness and continuity in training on advanced or recently fielded systems. However, some systems contractors perform maintenance and operations that are unique to the military. These system contractors perform services that have no military counterpart and are required in both peacetime and contingency operations. Currently there is no doctrinal definition to distinguish between these types of system contractors. The differences of these system contractors have a significant impact on priority for planners. For the sake of this paper I will refer to system contractors in two categories; mission enhancing and mission essential.

Mission enhancing system contractors provide assistance to equipment that is newly fielded, modified, or technically and maintenance intensive. New and upgraded fielded equipment is normally accompanied with a Field Service Representative (FSR). The FSR is a contractor with an inordinate amount of experience or developmental knowledge on the equipment. These contractors are supplied from the applicable program managers (PM) from periods of 1 to 3 years depending on the manufacturer, complexity of the system and the PM contract. During the warranty, the PM funds the deployment of the contractor.²¹ These contractors are generally one or two personnel per battalion. Their small numbers, minimal equipment support and short duration require

little disruption in the integration of the deployment phase which doesn't mandate their incorporation in the TPFDD.

However most units continue to utilize the FSRs beyond the warranty period to increase readiness and maintain a training depth in maintenance. The mission enhancing contractors' services are still managed through the PM offices but are paid for by either the unit or installation. Regardless of who pays the bill, a unit that wants the contractor assistance during deployments should contact their PM to ensure there are provisions for their contractors to deploy to a battlefield environment. Bear in mind that if the contractor service is not being funded by the PM, the service of a contractor in a potentially hostile environment will increase costs dramatically.²² For budget planning, ensure those costs are included in budget estimates and/or contingency operation funding requirements.

Mission essential system contractors are not augmenting or providing assistance for a system; they are the support for the system. Mission essential system contractors operate/maintain new or highly technological systems that the U.S. military can not maintain internally, e.g. unmanned aerial vehicles, Army Fox contamination detection vehicle.²³

Incorporating mission essential contractors in OPLANS and contingency plans (CONPLANS) is crucial. They are a vital support function and must be included in the TPFDD. Any unit that has mission essential contractors for direct or general support during peacetime should also review all applicable OPLANS and CONPLANS to ensure the contractors are included in the TPFDD and their deployment requirements are not in

conflict with their contract. Figure 4 provides a diagram for system contractor planning considerations.

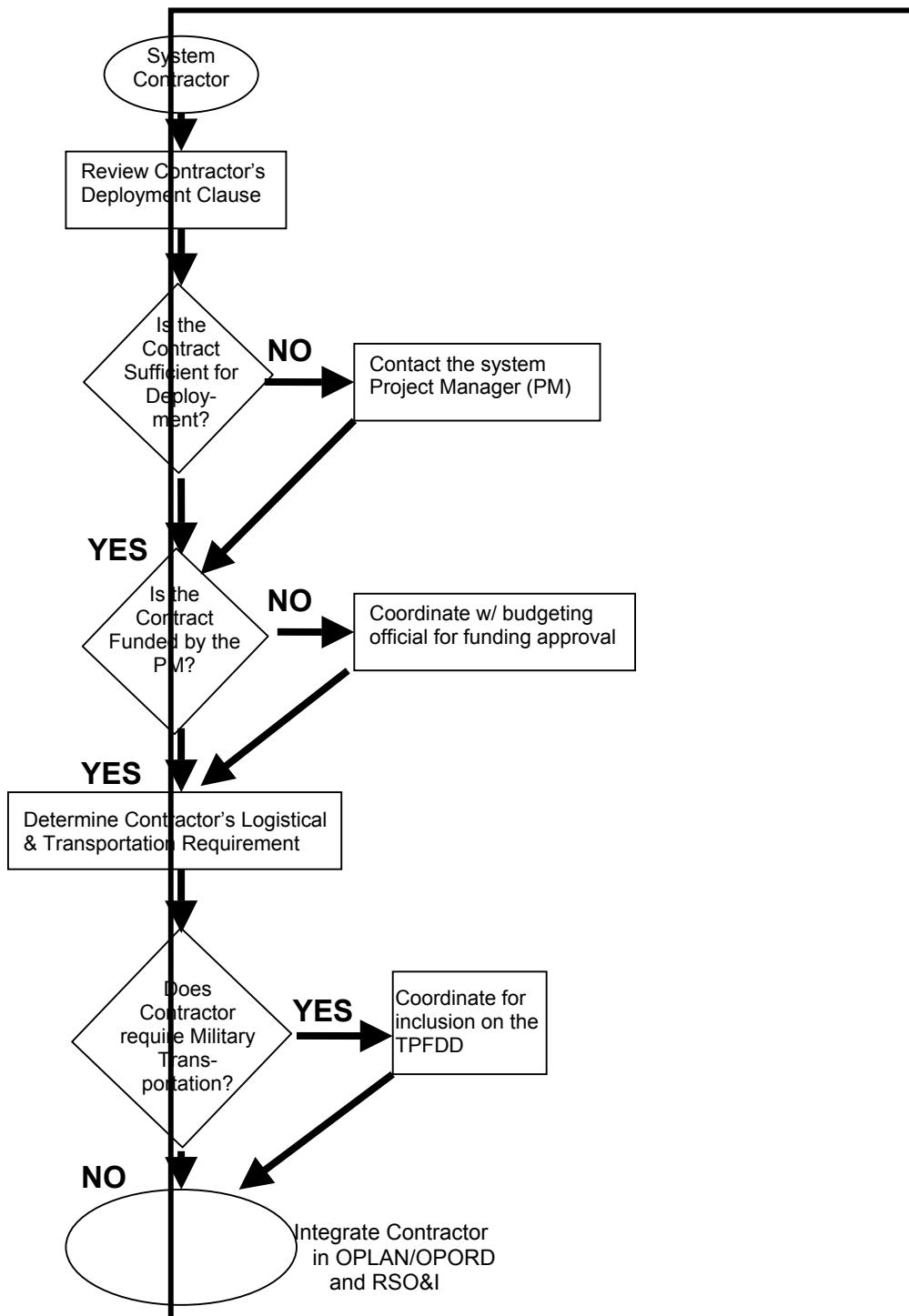


Figure 4. System Contractor Diagram

¹² Tyron Edwards D.D. , THE NEW DICTIONARY OF THOUGHTS, 695 (1965)

United States of America

¹³ FM3-100.21, 1-9

¹⁴ Gen. John M. Shalikashvili to Mr. Thaddeus Smith, Letter dated 5 November 1994, Washington, D.C.

¹⁵ ibid., 1-10

¹⁶ FM 100-10-2,

¹⁷ FM 3-100-21, 4-4

¹⁸ David L. Young, *Contractors on the Battlefield: Planning Considerations for the Joint Force Commander* 18 May 1998, Naval War College, Newport, RI

¹⁹ ibid., Figure 4-1

²⁰ ibid., 1-III

²¹ George Bedonarick, Phone Conversation, (10 December 2001) M1A2 Project Manager, DSN 786-6767

²² ibid.

²³ Major Matthew Mingus, Interview, 8 December 2001, Maxwell Air Force, AL 36113

Chapter 4

Contractor Considerations

“War hath no fury like a non-combatant.”²⁴
C.E. Montague

Combatant / Non-Combatant Status

Two critical issues that make contractors on the battlefield controversial are their proximity to harms way and force protection issues. Provisions by the military have been made to grant contractors on the battlefield a status as “Civilians Accompanying the Force” (CAF) which is recognized by the Geneva Convention.²⁵ How the American perspective categorizes contractors is irrelevant if the enemy does not abide by the Geneva Convention or acknowledges our definitions of combatant, non-combatant, and CAF. Deploying US military forces to support our national interests and expecting our adversaries to understand the American perspective of war is naïve and unrealistic. Depending on the type of conflict and enemy, contractors will be treated differently during a limited war, total war, or peacekeeping operations.²⁶

As system contractors assume more roles as equipment operators, it creates a grey area between the distinctions of CAF and combatants. According to FM 715-9, *Contractors Accompanying the Force* contractors may not be used in or under-take any role that could jeopardize their status as CAF. Contractors operating UAVs armed with weapons in a hostile environment require a change in Army regulations and considerations in their protection as civilians.

Limited Wars

Many of the past U. S. military involvements have been limited wars from the American perspective; however to our adversaries they have been total war. In the morality of war, *jus in bello* raises the issue of the discrimination of treatment between combatants, non-combatants and CAF. The participants and nature of warfare often determine if the level discrimination remains or erodes.²⁷ There are those that hold a firm belief that contractors on the battlefield assisting the war machine are just as liable as combatants. Therefore, there is often no moral distinction in targeting an armed combatant and a civilian involved in arming or feeding the combatant. Provisions for contractors to bear arms for defensive purposes on the battlefield further erode the ability for adversaries to discriminate between the status of combatant and non-combatants.²⁸ Force protection considerations for the contractors on the battlefield should be taken to protect them based on the enemy's perspective and *jus in bello*. Ultimately, it will be the adversaries' perspective that will determine how the contractors will be perceived and treated in warfare.

Principles of Contractor Support

“Using contractors to provide support and services to military operations is not without risks or costs. These basic principles provided the framework for developing doctrine and policy for contractors on the battlefield. They are applicable to contractor efforts today and on the future battlefield.”

Joe Fortner

The FM 100-10-2 and FM 3.100.21 outline principles for contractors on the battlefield support. The basic principles of contractor support should be used to verify

requirements. The following principles are not totally inclusive; however, they should be considered when planning or reviewing the use of contractors on the battlefield.²⁹

- Depending on mission, enemy, terrain, troops, time, and civilian considerations (METT-TC), contractors may deploy throughout an area of operations and in virtually all conditions.
- Commanders are legally responsible for protecting contractors in their area of operations.
- Contractors must have enough employees with appropriate skills to meet potential requirements.
- Contracted support must be integrated into the overall support plan.
- Contingency plans must ensure continuation of service if a contractor fails to perform.
- Contractor-provided services should be invisible to the users. Any links between Army and contractor automated systems must not place additional burdens on soldiers.
- The Army must be capable of providing critical support before contractors arrive in the theater or in the event that contractors either do not deploy or cannot continue to provide contracted services.
- Although contractors can be used as an alternative source of capabilities at theater or corps level, commanders must remain aware that, within a given operation using contractors could decrease flexibility.
- Changing contractor activities to meet shifting operational requirements may require contract modifications.
- Contractors are not Government employees, only contractors can manage and supervise their employees.³⁰
- In accordance with AR 715-9, generally contractor employee contractors are not assigned below Echelon above Division (EAD) but may be temporarily deploy forward as needed, consistent with the combatant commander's policy, the tactical situation, and terms and conditions of the contract.³¹

²⁴ Tyron Edwards D.D. , *The Dictionary of New Thoughts*, 1965, 715, United States of America

²⁵ FM3-100.21, 1-4

²⁶ *ibid.*, 1-5

²⁷ Dr. Alex Mosely, "Just War Theory", In *The Internet Encyclopedia of Philosophy*, <http://www.utm.edu/research/iep/j/justwar.htm>

²⁸ *ibid.*, NP

²⁹ "Institutionalizing Contractor Support on the Battlefield", Joe Fortner, Army Logistician, July-August 2000, pp 12-15.

³⁰ Timothy Pugh, email 2 February 2002,

³¹ *ibid.*

Chapter 5

Current Field Requirements and Recommendations

"The DOD components shall rely on the most effective mix of the total force, cost and other factors considered, including active, reserve, civilian, host nation, and contract resources necessary to fulfill assigned peacetime and wartime missions."

DODI 3020.37

Before contractor requirements are determined, a clear understanding of the type of contractor support is paramount. Peacekeeping operations deploy units as task forces that require split based support and logistical operations. Both ground and aviation maintenance support units do not have the MTOE authorization of equipment and personnel to conduct split-base operations for extended periods and distances. Many of the higher level maintenance functions require external support contractors either to augment home based or deployed force's operations. With limitations on the amount of military support authorized to deploy in peacekeeping operations, external contractor support tends to deploy forward to provide support on the battlefield rather than in garrison.

When planning contractor support requirements, there is a substantial numeric difference between the requirements for system and external support contractors that are augmenting MTOE shortfalls. Contractors substituting MTOE capabilities are approximately one for one for support capabilities. FSRs are often one or two contractors per battalion and have negligible transportation requirements due to their advisory and training role. Figure 5 shows contractor requirements for some critical Army and Air Force systems that require external support and system contractors.

SERVICE	SYSTEM	NUMBER OF CONTRACTORS	TYPE OF CONTRACTOR	BATTLEFIELD LOCATION	SUPPLY SUPPORT
ARMY	AH64A APACHE	10-12 per deployed battalion (BN)	External Support (AVIM MAINT)	Located at a fixed base facility with ACFT access	Through service supply system
ARMY	AH64 A & AH64 D APACHE	1-2 per BN Boeing & Lockheed Martin Rep	System MSN-N	Co-Located with ATK BN	Through service supply system
ARMY	PATRIOT ³²	1 FSR per BN RAYTHEON 1 LAR per BN	System MSN-N	Co-Located with BN's MAINT CO (DS & GS)	Through service supply system
ARMY	FOX M93A1 ³³	2 per Chemical Co. w/6 Systems	System MSN-E	ISB - Contractors provide unit, DS and above MAINT SPT. Deploy FWD w/excursions as needed	Contractor provides 100% repair parts and supply support
ARMY	Wolverine ³⁴	1 per BN	System MSN-N	Co-Located with BN MAINT Team	Through service supply system
AIR FORCE	COMPASS CALL EC-130H ³⁵	3-4 per ACFT	System MSN-E	FSRs deploy w/ACFT and assist O-level maintenance	Internal and Service Supply System
AIR FORCE	SENIOR SCOUT ³⁶	2 per ACFT	System MSN-E	FSRs deploy w/ACFT and assist O-level maintenance	Internal and Service Supply System

Figure 5. Joint Contractor Requirements 1 of 2

SERVICE	SYSTEM	NUMBER OF CONTRACTORS	TYPE OF CONTRACTOR	BATTLEFIELD LOCATION	SUPPLY SUPPORT
ARMY	M1A2 SEP Abrams MBT ³⁷	1 per fielded BN	System MSN-N FSR	Collocated w/ Org MAINT	Service Supply System
ARMY	M2A3 BFVS ³⁸	4 per fielded BN	System MSN-N FSR	Collocated w/ Org MAINT 1 mil van with Special Tools and Test Equip (STTE)	Service Supply System and 2 mil vans with repair parts.
ARMY	IAV ³⁹	10 per fielded BN GDLS	System MSN-N NET	Brigade Support Area, FWD to unit MAINT Collection Points as MSN requires	Service Supply System
AIR FORCE	C-17 ⁴⁰	2-4 deployment per BOEING	System MSN-E Software SPT & Engine Engineer	Field Engineers deploy with ACFT and normally work out of major staging location	Service Supply System
AIR FORCE	RC135 S Cobra Ball ⁴¹	2-3/ACFT RAYTHEON 2-3/ACFT TEXTRON	System MSN-E	FSRs deploy w/ACFT and provide mission SPT at FOB	Big Safari, Contractor, and Service Supply System
AIR FORCE	RC135 U/V/W Rivet Joint ⁴²	2-3/ACFT RAYTHEON	System MSN-E	FSRs deploy w/ACFT and provide mission SPT at FOB	Big Safari, Contractor, and Service Supply System

Figure 5. Joint Contractor Requirements 2 of 2

³² MAJ Patrick P. Brewington, Interview 28 JAN 02, Maxwell AFB, AL 36112

³³ MAJ Matthew Mingus, Interview, 8 December (2001), Maxwell Air Force, AL 36113

³⁴ David Tate, email 24 JAN 02, General Dynamics Land Systems Contractor.

³⁵ Phone conversation with Master Sergeant (Ret) Charles "Soppy" Cresap, 14 JAN 02

³⁶ *ibid.*

³⁷ David Tate, email 24 JAN 02, General Dynamics Land Systems Contractor.

³⁸ Bill DeBusschere, email 10 DEC 01, BFV Manager.

³⁹ David Tate, email 24 JAN 02, General Dynamics Land Systems Contractor.

⁴⁰ Maj Brian S. Robinson and Maj Todd A. Dierlam, Interview, 28 JAN 02, Maxwell AFB, AL 36112

⁴¹ Capt Dan Talati, email 17 JAN 02, Cobra Ball Project Engineer, Det 2. 645 MATS, Greenville, TX.

⁴² *Ibid.*

Conclusions

Despite significant efforts to effectively manage LOGCAP, U.S. Army, Europe Officials' inexperience and lack of understanding of the contract, the contractor's capabilities, and program management created problems during deployment and resulted in unnecessary costs.⁴³

General Accounting Office Report on Bosnia

An important planning aspect of contractors is understanding the basic concepts associated with contractors on the battlefield. Peacekeeping operations such as Bosnia and Kosovo create challenging curves and loops for logistical planning. Often 25% of a higher level maintenance unit's personnel will deploy in support of peacekeeping operations. More importantly, the 25% deployed personnel may represent 100% of a specific system support that still requires support at the home station. This void is normally filled by contractors in garrison. Furthermore, external contractors are hired to fill the same support requirements for the peacekeeping operations in theater creating a duplication of effort.

What impact does this have with contractors do on the battlefield? The disconnect has lead to a duplication of effort and funds to accomplish mission support requirements as well as hiding unit readiness issues. If a conflict arose that required the 25% deployed, who would fill the TPFDD in support of a contingency operation? As decisions are made for contractors on the battlefield there must be a clear understanding of the numbers and requirements of contractors required to deploy and the impacts on the units deploying and those remaining in garrison. Once this assessment has been determined, planners from battalion to the unified commander and joint staff levels must be informed of the contractor requirements. Another key factor that can't be stressed

enough is that, “if it is not in the contract, it doesn’t happen.”⁴⁴ The vertical flow of information will allow planners to adjust apportioned forces in the event of peacekeeping operations or in a two theater operation plan.

Many of the sources in this article have been from the Army’s FM 100-10-2, *Contracting on the Battlefield* and the draft FM 3-100.21 (100-21) *Tactics, Techniques and Procedures for Contractors on the Battlefield*. There has been and continues to be great emphasis invested in these manuals for reasons outlined in the paper. Any planner that is involved with contractors should be intimately familiar with these filed manuals. The manuals are extremely functional, easy to understand, and will be incorporated into some form of joint doctrine for contractors on the battlefield in the future.

My primary objective in this research paper has been to provide the basic concepts in planning considerations and requirements for contractors on the battlefield. Sources cited in the bibliography can assist in providing additional detailed planning considerations for a plethora of issues such as: legal, joint, ethics, logistics, safety and budgeting. The internet is also an excellent tool for finding more information on contractors on the battlefield. Using keywords *contractors on the battlefield* on an internet search engine will produce over 13,000 entries.

Although understanding the differences between the types of contractors is important, the major issues with regard to contractors on the battlefield is they are not soldiers, and because they are not, the manner in which they are managed, deployed, supported, and protected is different. If any facet of contractor support is not planned for, such as how they get to the battlefield, their positioning on the battlefield, medical and life support systems, or force protection issues is not addressed; the commander has a

potential loss of combat effectiveness.⁴⁵ These issues must be addressed by today's operators and logisticians in the planning process. As today's military incorporates systems that are highly technical and require contractor support, planning and integration of the contractors on the battlefield is essential to maximize the potential of new technologies.

⁴³ General Accounting Office, Contingency Operations: Opportunities to Improve the Logistics Civil Augmentation Program, Report to Congressional Requestors.

(Washington, D.C.: February, 1997), 14

⁴⁴ Michael Williams, MPRI Inc, email 29 January 2002.

⁴⁵ Ibid.

Bibliography

Air Force Pamphlet 10-231, *Federal Civilian Deployment Guide*, 1.1, 1 April 1999.

Army Field Manual 3-100.21 (100-21) "Tactics, Techniques and Procedures for Contractors on the Battlefield", 2nd Draft, July 2001.

Army Field Manual 100-10-2, *Contracting Support on the Battlefield*, August 1999.

Bedonarick, George, Phone Conversation, M1A2 Program Manager, DSN 786-6767, 10 December 2001

BOSNIA <http://encarta.msn.com> © 1997-2000 Microsoft Corporation.

Brewington, MAJ Patrick P., Interview 28 JAN 02, Maxwell AFB, AL 36112

Cresap, Charles "Soppy", Phone conversation with Air Force Master Sergeant (Ret) 14 JAN 02.

DeBusschere, Bill, email 10 DEC 01, Bradley Fighting Vehicle Manager.

DESERT STORM, <http://encarta.msn.com/find/concise>. "Persian Gulf War," Microsoft® Encarta® Online Encyclopedia 2001

Dierlam, Todd A. Maj and Robinson Brian S. Maj, Interview, 28 JAN 02, Maxwell AFB, AL 36112.

Edwards, Tyron D.D., *The New Dictionary of Thoughts*, 715 (1965) United States of America.

Fortner, Joe "Institutionalizing Contractor Support on the Battlefield", Army Logistician, July-August 2000, pp 12-15.

Joint Publication 4-0, *Doctrine for Logistics of Joint Operations*, I-6, 27 January 1995.

Mingus, Matthew MAJ, Interview, 8 December (2001), Maxwell Air Force, AL 36113.

Mosely, Dr Alex. "Just War Theory", In *The Internet Encyclopedia of Philosophy*, <http://www.utm.edu/research/iep/j/justwar.htm>.

Shalikashvili, Gen. John M., to Mr. Thaddeus Smith, Letter dated 5 November 1994, Washington, D.C..

Tate, David, email 24 JAN 02, General Dynamics Land Systems Contractor.

Talati, Capt Dan, email 17 JAN 02, Cobra Ball Project Engineer, Det 2. 645 MATS, Greenville, TX.

User's Guide for JOPES, (Joint Operations Planning and Execution System), 1 May 1995

Williams, Michael, email 29 January 2002, MPRI Inc..

Young, David L., *Contractors on the Battlefield: Planning Considerations for the Joint Force Commander*, Naval War College, Newport, RI, 18 May 1998.

Zamparelli, Colonel Steven J., *Contractor on the Battlefield: What have we signed up for?*, XXIII, No. 3, Air Force Journal of logistics, Fall 1999.